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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/977,795	10/15/2001	David C. Andreas	75622.P0040	4430

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William D. Davis  
Davis & Associates  
Box 1093  
Dripping Springs, TX 78620

EXAMINER

MASON, DONNA K

ART UNIT PAPER NUMBER

2111

DATE MAILED: 05/06/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

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# Office Action Summary

Application No.

09/977,795

Applicant(s)

ANDREAS ET AL.

Examiner

Donna K. Mason

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☒ Claim(s) 15 and 17 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 15 and 17 are objected to because of the following informalities:

In claim 15, line 11, insert --and-- after "port;".

In claim 17, line 1, insert --the-- before "daisy chain".

Appropriate correction is required. See 37 CFR 1.75.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 17 recites the limitation "the plurality of second channel identifiers" in line 6. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-5, 7-10, and 12-14 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Application Publication No. 2002/0016875 to Yokoyama.

With regard to claims 1 and 2, Yokoyama discloses a method including the steps of: a) serially providing a command sequence containing a first channel identifier to a first device of a plurality of daisy chained devices (paragraph [0036]; and Fig. 3, items 40 and 50); and b) modifying the first channel identifier to generate a second channel identifier for transmission to the next device in the daisy chain (paragraph [0037]; and Fig. 3, items 50 and 60). Yokoyama also discloses the method where the command sequence includes a command word, an address word, and at least one data word (paragraph [0043]; and Fig. 2, where the ID number is the address word, commands is the command word, and parameters are the data words).

With regard to claims 3 and 4, Yokoyama discloses the method further including the step of: c) executing a command of the command sequence on any device receiving the command, if that device has a received channel identifier matching a pre-determined value, wherein each of the plurality of devices uses the same pre-determined value for comparison (paragraphs [0044] and [0045]).

With regard to claim 5, 7, and 8, Yokoyama also discloses the method where step b) further includes the step of incrementing the first channel identifier to form the second channel identifier (paragraphs [0037], [0038], and [0039]).

With regard to claims 9, 10, and 12, Yokoyama discloses a serial device apparatus including: a serial input port for receiving a first command sequence having a

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first channel identifier and a remaining command sequence (Fig. 3, item 9b); a daisy chain output port (Fig. 3, item 9a); and command sequence processing logic for modifying the first channel identifier to form a second channel identifier, wherein the command processing logic provides the second channel identifier and the remaining command sequence to the daisy chain output port (paragraph [0037]). Yokoyama also discloses the apparatus where the first channel identifier is incremented to form the second channel identifier (paragraph [0037]).

With regard to claims 13 and 14, Yokoyama discloses the apparatus, further including: command execution logic for executing the command if the first channel identifier matches a pre-determined value (paragraphs [0044] and [0045]).

Therefore, Yokoyama reads on the invention as claimed.

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 6 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yokoyama.

As discussed above regarding the 35 U.S.C. 102(e) rejection, Yokoyama discloses all the features of independent claims 1 and 9. Yokoyama does not expressly

disclose the method where step b) further includes the step of decrementing the first channel identifier to form the second channel identifier.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the first channel identifier by decrementing the first channel identifier to form the second channel identifier. Applicant has not disclosed that decrementing the first channel identifier to form the second channel identifier provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art would have expected Applicant's invention to perform equally well with incrementing the first channel identifier to form the second channel identifier (paragraph [0037]) because whether the first channel identifier is incremented, as disclosed in Yokoyama, or decremented, as disclosed in the present invention, Applicant's invention will perform equally as well.

Therefore, it would have been obvious to one of ordinary skill in this art to modify Yokoyama to obtain the invention as specified in claims 6 and 11.

9. Claims 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yokoyama in view of Applicant's Admitted Prior Art ("APA").

With regard to claims 15 and 16, Yokoyama discloses an apparatus including: a bus master (Fig. 3, item 40; paragraph [0036]) providing an initial command sequence having an initial channel identifier; a plurality of serial devices (Fig. 3, items 50, 60, and 70), each device comprising: a serial input port for receiving a first command sequence having a first channel identifier and a remaining command sequence; a daisy chain

output port (Fig. 3, item 9a); and command sequence processing logic for modifying the first channel identifier to form a second channel identifier, wherein the command processing logic provides the second channel identifier and the remaining command sequence to the daisy chain output port (paragraph [0037]); and a bus coupling the serial devices in a daisy chain configuration (Fig. 3).

With regard to claims 17-20, Yokoyama discloses the apparatus where when coupled in the daisy chain configuration, the bus master provides the initial command sequence to a first serial device of the plurality of devices (paragraph [0036]; and Fig. 3, items 40 and 50), wherein each subsequent device receives a modified command sequence including the second channel identifier and the remaining command sequence provided by a preceding serial device, wherein the plurality of second channel identifiers is distinct. Yokoyama also discloses the apparatus where each serial device further includes command execution logic, wherein the command execution logic executes the command sequence received by that device if the associated channel identifier matches a pre-determined value shared by the plurality of serial devices (paragraphs [0044] and [0045]).

Further in regards to claims 15 and 16, Yokoyama does not expressly disclose a bus coupling the serial devices in a normal configuration, or the apparatus where each of the plurality of devices receives the initial command sequence substantially simultaneously.

The APA discloses a bus coupling the serial devices in a normal configuration, or the apparatus where each of the plurality of devices receives the initial command

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sequence substantially simultaneously (page 1, lines 15-21). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the APA with Yokoyama. The suggestion or motivation for doing so would have been provide the serial devices with the capability of responding or acting on information communicated when their respective select lines are asserted (page 1, lines 16 and 17).

Therefore, it would have been obvious to combine the APA with Yokoyama to obtain the invention as specified in claims 15-20.

### ***Conclusion***

10. A shortened statutory period for reply is set to expire THREE MONTHS from the mailing date of this communication. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this communication.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donna K. Mason whose telephone number is (703) 305-1887. The examiner can normally be reached on Monday - Friday, 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark H. Rinehart can be reached on (703) 305-4815. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DKM



**MARK H. RINEHART**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2100**